Abstract

The sulfur content of liquid cracking products, especially the cracked gasoline, of the catalytic cracking process is reduced by the use of a sulfur reduction catalyst composition comprising a porous molecular sieve which contains a metal in an oxidation state above zero within the interior of the pore structure of the sieve as well as a rare earth component which enhances the cracking activity of the cracking catalyst. The molecular sieve is normally a faujasite such as USY. The primary sulfur reduction component is normally a metal of Period 3 of the Periodic Table, preferably vanadium. The rare earth component preferably includes cerium which enhances the sulfur reduction activity of the catalyst. The sulfur reduction catalyst may be used in the form of a separate particle additive or as a component of an integrated cracking/sulfur reduction catalyst.